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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/606,400	06/29/2000	William Palmer Lord	PHA-23.761	7192

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EXAMINER

SHELTON, BRIAN K

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/606,400

Applicant(s)

LORD ET AL.

Examiner

Brian Shelton

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2 and 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Action is in response to the Application filed 29 June 2000.
2. The Application has been examined. **Original claims 1-22** are pending. The rejections cited are as stated below:

Election/Restrictions

3. Claims 23-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 7. Elected claims 1-22 have been examined on the merits.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claim 1, 4, 10-13, 14, 17, and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hite et al. (Hite), U.S. Patent No. 6,002,393 in view of Zigmond et al. (Zigmond), U.S. Patent No. 6,698,020.

Regarding **claims 1 and 14**, Hite discloses an addressable advertising system and corresponding method (Fig. 5; see col. 5, lines 1-17) comprising:

- (a) receiver circuitry (Tuner **508**, Detector **512**, Descrambler **516** and On Screen Display **520**) capable of receiving an incoming television signal from an external source, generating therefrom an original baseband signal, and transmitting said output signal to a display associated with said addressable advertising system (col. 9, lines 45-54; col. 10, lines 13-17 [baseband output to television]);
- (b) a local storage device (Video & Audio Storage Device **551**) coupled to said receiver circuitry capable of storing a plurality of replacement video advertisements (col. 12, lines 3-15); and
- (c) an advertisement controller (Commercial Processor **553/578** and Microcontroller **550**) coupled to said receiver circuitry and said local storage device capable of detecting targeted ad playback point, wherein said advertisement controller, in response to said detection, causes said receiver circuitry to receive from said local storage device a first selected replacement video advertisement and wherein said receiver circuitry generates therefrom a replacement output video signal and transmits said replacement output video signal to said display (col. 12, lines 15-27; see col. 12, lines 28-32 [integration of Commercial Processor and Microcontroller]).

But Hite fails to disclose the advertisement controller detecting a first swap control signal, as claimed.

However, Zigmond, in an analogous art, teaches an advertisement insertion system comprising an advertisement controller (Fig. 5, Switching Decision Unit 88) capable of detecting a first swap control signal transmitted in an incoming television signal (col. 8, lines 30-41 [signal encoded in programming (e.g., first swap control signal)]; col. 15, lines 52-61) and receiver circuitry comprising a multiplexer (Video Switch 90) controlled by the advertisement controller (col. 15, lines 52-61) for the benefit of providing remote control of when locally stored targeted advertisements are retrieved and displayed.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the advertisement controller of Hite to incorporate detecting a first swap control signal transmitted in an incoming television signal and modify the receiver circuitry to incorporate a multiplexer, as taught by Zigmond, for the benefit of providing remote control of when locally stored targeted advertisements are retrieved and displayed in an addressable advertising system.

Regarding **claims 4 and 17**, the teachings of Hite in view of Zigmond are relied upon as discussed above relative to claims 1 and 14.

Zigmond further teaches a replacement advertisement download controller capable of receiving incoming replacement video advertisements from an

external source and storing the incoming replacement video advertisements in a local storage device (col. 14, line 66 – col. 15, line 23 [download of advertisements by advertisement receiving means]; col. 15, lines 24-34 [storage of ads in Advertisement Repository **86**] for the benefit of increasing the efficiency of an advertisement delivery system headend by allocating control of updating and storage functions to the individual client devices.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the addressable advertising system client devices of Hite in view of Zigmond to incorporate a replacement advertisement download controller capable of receiving incoming replacement video advertisements from said external source and storing said incoming replacement video advertisements in said local storage device, as taught by Zigmond, for the benefit of increasing the efficiency of an advertisement delivery system headend by allocating control of updating and storage functions to the individual client devices in an addressable advertising system.

Regarding **claims 10 and 22**, the teachings of Hite in view of Zigmond, are relied upon as discussed above relative to claim 1 and 14. Hite discloses receiver circuitry comprising a Vertical Blanking Interval decoder (Fig. 5; In Band Data Extractor **538**, col. 9, lines 55-59; col.10, lines 20-42), but fails to disclose the VBI decoder detecting the swap control signal, as claimed. However, Zigmond further teaches receiver circuitry comprising a vertical blanking interval

decoder for detecting a swap control signal transmitted in an incoming television signal (col. 15, lines 45-52) for the benefit of incorporating control data into particular television programming channel.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the receiver circuitry of Hite in view of Zigmond to incorporate a vertical blanking interval (VBI) decoder capable of detecting said first swap control signal transmitted during a vertical blanking interval in said incoming television signal, as further taught by Zigmond, for the benefit of incorporating control data into a particular television programming channel in an addressable advertising system.

The limitation of **claim 11** is encompassed by the teachings of Hite in view of Zigmond, as discussed above relative to claim 10. In particular, Hite discloses a down-converter coupled to a vertical blanking interval decoder and capable of down-converting the incoming television signal to the original baseband video signal (Fig. 5, Tuner **508** and Detector **512** coupled to In Band Data Extractor **538**; col. 9, lines 40-59).

The limitation of **claim 12** is encompassed by the teachings of Hite in view of Zigmond, as discussed above relative to claim 11. Zigmond discloses the receiver circuitry comprising a multiplexer (Fig. 5; Video Switch **90**) having first input capable of receiving an original video signal (Programming Delivery) and a

second input capable of receiving a replacement video signal (Advertisement Repository **86**), wherein the multiplexer is controlled by the advertisement controller (Switching Decision Unit **88**; col. 15, lines 52-61).

The limitation of **claim 13** is encompassed by the teachings of Hite in view of Zigmond, as discussed above relative to claim 1. Specifically, Hite discloses a video processor (Tuner **508**, Detector **512**, Descrambler **516**, On Screen Display **520**) having a first input (Electrical/Optical Connection **502**) capable of receiving said incoming television signal and generating therefrom said original baseband video signal and a second input (Ads stored in Video & Audio Storage **551** transmitted to input at On Screen Display **520**) capable of receiving said first selected replacement video advertisement and generating therefrom said replacement baseband video signal (col. 9, lines 45-54; col. 10, lines 13-17 [baseband output to television]; col. 12, lines 15-27).

6. **Claims 2 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hite et al. (Hite), U.S. Patent No. 6,002,393 in view of Zigmond et al. (Zigmond), U.S. Patent No. 6,698,020, as applied to claim 1, further in view of Picco et al. (Picco), U.S. Patent No. 6,029,045

As for **claims 2 and 15**, the teachings of Hite in view of Zigmond are relied upon as discussed above relative to claim 1 and 14. Although Hite suggests the

local storage device may comprise a magnetic or optical media (col. 12, lines 3-9), Hite and Zigmond fails to specifically disclose the local storage device comprising at least one of a magnetic fixed disk drive, a DVD drive, and a compact disc drive.

However, Picco, in an analogous art, teaches a local advertisement storage device comprising a magnetic fixed disk drive (Fig. 7; Disk 186; col. 11, lines 35-40). A hard disk drive has the typical benefit of providing large storage capacity with low retrieval time.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the local storage device of Hite in view of Zigmond to include a local storage device comprising a magnetic fixed disk drive, as taught by Picco, for the typical benefit of providing large storage capacity with low retrieval time in an addressable advertising system.

7. **Claims 3 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hite et al. (Hite), U.S. Patent No. 6,002,393 in view of Zigmond et al. (Zigmond), U.S. Patent No. 6,698,020, as applied to claims 1 and 14, further in view of Lemmons et al. (Lemmons), U.S. Patent No. 6,442,755.

Regarding **claims 3 and 16**, the teachings of Hite in view of Zigmond are relied upon as discussed above relative to claims 1 and 14. The combination of

Hite in view of Zigmond fails to disclose the local storage device coupled via a network connection, as claimed.

However, Lemmons, in an analogous art, teaches a local storage device coupled to a set-top box via a network connection (col. 4, line 51 – col. 5, line 3). A network connection provides the benefit of allowing storage devices located in a separate physical location to be utilized to store data.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the local storage device of Hite in view of Zigmond to include the local storage device is coupled to the addressable advertising system via a network connection, as taught by Lemmons, for the typical benefit of allowing storage devices located in a separate physical location to be utilized to store data in an addressable advertising system.

8. **Claims 5 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hite et al. (Hite), U.S. Patent No. 6,002,393 in view of Zigmond et al. (Zigmond), U.S. Patent No. 6,698,020, as applied to claims 4 and 17, further in view of Wood et al. (Wood), U.S. Patent Publication No. US 2002/0057893A1.

As for **claims 5 and 18**, the teachings of Hite in view of Zigmond are relied upon as discussed above relative to claims 4 and 17. Although Zigmond suggests storing replacement advertisements as digitally coded video programming (Zigmond at col. 15, line 28-31) and, further, receiving the

advertisements from an incoming television signal and storing the advertisements in a local storage device (Zigmond at col. 15, lines 11-16 [receiving advertisements from advertisement delivery channel (i.e., a first selected channel)]) and Hite additionally suggests the desirability of digitally coded advertisements stored in a compressed format (Hite at col. 12, lines 9-12), Hite in view of Zigmond fail to specifically disclose the MPEG encoder circuit, as claimed.

However, Wood, in an analogous art, discloses an MPEG encoder circuit (Fig. 7; MPEG encoder **703**) capable of receiving an incoming television signal and converting incoming television programming to MPEG data capable of being stored locally (paragraphs 21 and 22 [describing digitizing TV video input and conversion to MPEG format by MPEG-2 Encoder **114**]; paragraph 58 [storage of MPEG video on hard disk drive **142**]; see paragraph 5). MPEG encoding typically has the benefit of enhanced picture quality with high compression ratios.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the replacement advertisement download controller of Zigmond in view of Hite to incorporate an MPEG encoder circuit and storing video programming as MPEG data locally, as taught by Wood, for the typical benefit of enhanced picture quality with high compression ratios in an addressable advertising system.

As for **claims 6 and 19**, the teachings of Hite in view of Zigmond are relied upon as discussed above relative to claims 4 and 17. While Zigmond discloses a replacement advertisement download controller comprising a modem capable of receiving from a telephone network a first incoming replacement video advertisement (Zigmond at col. 15, lines 2-11, wherein download advertisements via a telephone network connection inherently discloses a modem in the client device) and storing said first incoming video advertisement as digitally coded data in a local storage device (Zigmond at col. 15, line 28-31), Zigmond in view of Hite fail to specifically disclose storing the first incoming replacement video advertisement as MPEG data.

However, Wood, in an analogous art, discloses an MPEG encoder circuit (Fig. 7; MPEG encoder **703**) capable of receiving an incoming television signal and converting incoming television programming to MPEG data capable of being stored locally (paragraphs 21 and 22 [describing digitizing TV video input and conversion to MPEG format by MPEG-2 Encoder **114**]; paragraph 58 [storage of MPEG video on hard disk drive **142**]; see paragraph 5). MPEG encoding typically has the benefit of enhanced picture quality with high compression ratios.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the storage of the replacement video advertisements of Hite in view of Zigmond to incorporate storing the advertisements (e.g., television programming) as MPEG data, as taught by

Wood, for the typical benefit of enhanced picture quality with high compression ratios in an addressable advertising system.

9. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hite et al. (Hite), U.S. Patent No. 6,002,393 in view of Zigmond et al. (Zigmond), U.S. Patent No. 6,698,020, as applied to claims 4 and 17, further in view of D'Souza et al (D'Souza), U.S. Patent No. 6,745,224.

Regarding **claim 7**, Hite in view of Zigmond is relied upon for the disclosure as discussed above relative to claim 4. Although Zigmond discloses advertisement download times periodically conducted at nighttime or other times of day (col. 15, lines 8-12), Hite in view of Zigmond fails to specifically disclose receiving replacement advertisement according to modifiable download time values, as claimed.

However, D'Souza, in an analogous art, teaches a download controller that receives replacement data at a predetermined time according to modifiable download time values stored in a memory associated with the download controller (col. 7, lines 1-16 [describing periodically recurring updating operations] and col. 8, lines 21-38 [updating operation performed on scheduled basis wherein user specifies a schedule of times by entering said times in a list box control]). User specified download times provide the benefit of allowing for

user flexibility in specifying times desired by the user, not times dictated by a headed, for periodic updating operations.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the replacement advertisement controller of Hite in view of Zigmond to include receiving said incoming replacement video advertisements at a predetermined time according to modifiable download time values stored in a memory associated with said advertisement controller, as taught by D'Souza, for the typical benefit of allowing for user flexibility in specifying times desired by the user, not times dictated by a headend, for periodic updating operations in an addressable advertising system.

10. **Claims 9 and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hite et al. (Hite), U.S. Patent No. 6,002,393 in view of Zigmond et al. (Zigmond), U.S. Patent No. 6,698,020, as applied to claim 1 and 14, further in view of Alexander et al. (Alexander), U.S. Patent No. 6,177,931.

Regarding **claims 9 and 21**, Hite in view of Zigmond is relied upon for the disclosure as discussed above relative to claim 1 and 14. Although Zigmond suggests that advertisements are selected and displayed according to any desired method, Hite in view of Zigmond fails to specifically disclose detecting a replacement advertisement selection signal identifying a first selected replacement advertisement, as claimed.

However, Alexander, in an analogous art, teaches an advertisement controller capable of detecting a advertisement selection signal transmitted in an incoming television signal, wherein the advertisement selection signal comprises a data value identifying a selected advertisement, and wherein the controller, in response to the advertisement selection signal, causes a local storage device to transmit the selected advertisement to receiver circuitry (col. 32, lines 31-54) for the benefit of providing a head-end with direct control over which of a set of advertisements stored locally on a client device will be displayed at a particular time.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the advertisement controller of Hite in view of Zigmond, to incorporate detecting a replacement advertisement selection signal transmitted in said incoming television signal, wherein said replacement advertisement selection signal comprises a data value identifying said first selected replacement video advertisement, and wherein said advertisement controller, in response to said detection of said replacement advertisement selection signal, causes said local storage device to transmit said first selected replacement video advertisement to said receiver circuitry, as taught by Alexander, for the benefit of providing a headend with direct control over which of a set of advertisements stored locally on a client device will be displayed at a particular time in an addressable advertising system.

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11. **Claims 8 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hite et al. (Hite), U.S. Patent No. 6,002,393 in view of Zigmond et al. (Zigmond), U.S. Patent No. 6,698,020, as applied to claim 1, further in view of Allen et al. (Allen), U.S. Patent No. 5,892,535.

As for **claims 8 and 20**, the teachings of Hite in view of Zigmond are relied upon as discussed above relative to claim 1. Although Zigmond teaches an advertisement controller responsive to a swap control signal (col. 8, lines 30-41 [signal encoded in programming (e.g., first swap control signal)]; col. 15, lines 52-61), Hite in view of Zigmond fails to specifically disclose a second swap control signal, as claimed.

However, Allen, in an analogous art, teaches an advertisement insertion system (Fig. 2) wherein a receiver (network interface unit **206**) receives switching cue signals comprising a return cue (i.e., second swap control signal), wherein the switching signals are included in signals transmitted from a central facility (e.g., national video feed programming received at national feed downlink **208**; see col. 16, lines 21-25) (col. 30, line 41 – col. 31, line 9; see col. 17, line 66 – col. 18, line 10) for the benefit of remotely controlling the return timing in local ad insertion to allow for varying ad insertion times.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the advertisement controller of Hite in view of Zigmond to incorporate detecting a second swap control signal

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transmitted in the incoming television signal, wherein the advertisement controller, in response to said detection of the second swap signal, causes the receiver circuitry to transmit the original baseband video signal to the display, as taught by Allen, for the benefit of allowing a headend (i.e., programming provider) to remotely control the return timing in local ad insertion to allow for varying ad insertion times

Conclusion

12. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Shelton whose telephone number is (703) 305-8714. The examiner can normally be reached on Monday-Friday, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the primary examiner, Christopher Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Brian Shelton
Examiner
Art Unit 2611


CHRIS GRANT
PRIMARY EXAMINER

BS